IN THE CLAIMS:

A complete listing of all the claims is presented herewith.

Claims 1 to 15. (Cancelled).

Claim 16. (Currently Amended).

Method for producing UV polarizers ~~who~~ with a polarizing effect ~~is~~ based on dichroitic absorption comprising

in a first step embedding metal ions in a glass body in a near-surface layer; and

in a second step tempering the glass to have the metal ions reduced to and precipitated in form of crystalline particles; and

in a third step an after-tempering takes place in a non-reducing atmosphere to transform the particles produced in the second step into particles of a larger size; and

in a fourth step embedding metal ions in the same manner as that done in the first step; and

in a fifth step tempering the glass again, with the metal ions embedded in the fourth step precipitating in the glass in a near-surface layer in form of crystalline particles that are of a lesser size than those created in the third step; and

in a sixth step deforming the glass body at temperatures near the glass transition temperature so that the particles of different sizes are all transformed into particles of revolution-ellipsoidal shapes with varying semiaxis ratios.

Claim 17. (Currently Amended).

Method for producing UV polarizers with a polarizing effect based on dichroitic absorption comprising

in a first step embedding metal ions in a glass body in a near-surface layer; and

in a second step tempering the glass to have the metal ions reduced to and precipitated in form of crystalline particles; and

in a third step an after-tempering takes place in a non-reducing atmosphere to transform the particles produced in the second step into particles of a larger size; and

~~The method according to claim 16, wherein the method is repeated in the first step through to the third step followed by~~ a third sub step in which the glass is deformed ~~as described in the sixth step,~~ with ~~large~~ spherical particles being re-shaped into ~~revolution-~~ ellipsoidal ones; ~~followed by the fourth step, the fifth step and sixth step.~~

in a fourth step embedding metal ions in the same manner as that done in the first step; and

in a fifth step tempering the glass again, with the metal ions embedded in the fourth step precipitating in the glass in a near-surface layer in form of crystalline particles that are of a lesser size than those created in the third step; and

in a sixth step deforming the glass body at temperatures near the glass transition temperature so that the particles of different sizes are all transformed into particles of

revolution-ellipsoidal shapes with varying semiaxis ratios.

Claim 18. (Currently Amended).

Method according to claim 16, wherein the method is repeated ~~multi-copied~~ in the first step through to the fifth step, until the particles' size profile shows ~~the specified~~ a broad distribution, followed by the sixth step.

Claim 19. (Currently Amended).

Method according to claim 16, wherein once all the steps as described are completed ,

then tempering the glass at a temperature above a specified lower cooling point and the particles of ~~revolution-~~ellipsoidal shapes are re-deformed ~~into~~ towards their initial ~~original~~ shapes. ~~in a limited specific way.~~

Claim 20. (Currently Amended.

Method according to claim 16, wherein ~~it is~~ the metal ions are selected from silver, gold, copper ~~and/or~~ and aluminum ions, or their mixtures, that are embedded.

Claim 21. (Previously Presented).

Method according to claim 16, wherein a reduction process according to the second step takes place in a reducing atmosphere.

Claim 22. (Previously Presented).

Method according to claim 16, wherein the reduction process of step 2 takes place in a hydrogen gas or in a hydrogen/nitrogen gas atmosphere.

Claim 23. (Previously Presented).

Method according to claim 16, wherein a reduction process according to the second step takes place in a non-reducing atmosphere with the metal ions being reduced by substances that are already existent in the glass and have a reducing effect.

Claim 24. (Previously Presented).

Method according to claim 16, wherein the third step takes place at a temperature above 300°C, but not exceeding 700°C.

Claim 25. (Currently Amended).

Method according to claim 16, wherein in said sixth step the glass is stretched in such a way that it becomes twice or even 30 times as long as it was before ~~drawing~~ stretching.

Claim 26. (Currently Amended).

Method according to claim 16, wherein an only narrow heating zone is used in said sixth step in a continuous deforming ~~process,~~ of the glass body, and then drawing the glass, and then after ~~drawing~~ stretching the glass, the glass is cooled down fast enough to prevent any re-deformation of the ~~revolution-~~ellipsoidal particles.

Claim 27. (Previously Presented).

Method according to claim 16, wherein energy is locally applied to very narrow areas in the glass body's surface causing a specific re-deforming of the revolution-ellipsoidal particles.

Claim 28. (Previously Presented).

Method according to claim 27, wherein an energy input is made by means of laser and/or electron beam technology.

Claim 29. (Previously Presented).

Method according to claim 16, comprising masking a glass surface and etching away thin surface layers from it.

Claim 30. (Previously Presented).

Method according to claim 16, wherein a local energy input and/or a masking and etching away is used to produce polarizers of a structured design.